Conservation

of

Photographic Materials

✦

A Basic Reading List

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compiled by
Klaus B. HENDRIKS
and
Anne WHITEHURST

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K1A 0N3
(613) 995-5138

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Foreword

The purpose of compiling the following reading list is twofold: to serve as an introduction to the field of conservation of photographic records for summer students and interns at the Photograph Conservation Laboratory of the National Archives of Canada and to satisfy the frequent requests from individuals and institutions for references to literature on the conservation of photographic materials.

The scope of this bibliography primarily covers references on the preservation of still photographic images made by processes that are based on the light-sensitivity of silver halides. Certain references on the properties and preservation of microfilms and motion picture films are also included. Finally, there are a few articles on the stability of some non-silver photographic materials used for microfilms. References are divided into eleven sections according to subject matter. This division should be considered as approximate, since some similarities exist, for example, between the topics covered in Sections V and IX. Articles not found in one section are likely present in another related section. References are listed within each section in chronological order beginning with the most recent ones.

The term "basic," used in the title, is not meant to be synonymous with "simple"; rather it is intended to indicate that the study of the quoted literature is a fundamental requirement for anyone who seriously wishes to learn more about photographic materials and their properties and to conduct studies and experiments in the field. Since photographic negatives and prints are products of a highly developed industrial technology, the continuing study of this technology — in so far as it is available in published form — is strongly recommended.

Well-known handbooks such as those listed below contain a wealth of useful information and so should be kept close at hand and consulted frequently.

1. 1979. Haist, G. *Modern photographic processing*. New York: John Wiley and Sons. 2 v.
2. 1977. Sturge, J.M., ed. *Neblette's handbook of photography and reprography: materials, processes and systems*. 7th ed. (and earlier editions). New York: Van Nostrand Reinhold.
3. 1977. James, T.H., ed. *The theory of the photographic process*. 4th ed. (and earlier editions co-edited by C.E.K. Mees). New York: Macmillan.
4. 1976. Glafkidès, P. *Chimie et physique photographiques*. 4th ed. Paris: Publications Photo-Cinéma Paul Montel.
5. 1976. Wall, E.J.; Jordan, F.I. *Photographic facts and formulas*. Revised and extensively rewritten by J. S. Carroll. Englewood Cliffs, NJ: Prentice-Hall.
6. 1973. Thomas, W., ed. *SPSE handbook of photographic science and engineering*. New York: Wiley.

A classic handbook of photographic technology was published by J.M. Eder during the first three decades of this century. While this handbook, regrettably, was never translated into the English language, references for two of its volumes are nevertheless given because of the scarcity of the literature on the subject. They deal with the manufacture of photographic materials and with making black-and-white photographic prints on paper.

7. 1930. Wentzel, F. *Die Fabrikation der photographischen Platten, Filme und Papiere und ihre maschinelle Verarbeitung* [The manufacture of plates, films and papers, and their processing by machines]. Halle (Saale): W. Knapp. (Ausführliches Handbuch der Photographie; v. 3, pt. 1).
8. 1928. Eder, J.M. *Die photographischen Kopierverfahren mit Silbersalzen (Positiv-Prozess) und die photographischen Roh- und Barytpapiere* [Photographic methods of producing prints using silver salts and the photographic printing papers]. Revised by F. Wentzel. Halle (Saale): W. Knapp. (Ausführliches Handbuch der Photographie; v. 4, pt. 1).

The first version of this bibliography was prepared in 1982 with the assistance of Diane Hopkins who was responsible for the organization of this Laboratory's several thousand documents on the subject into a data base with automated access. The data base, known as PHOCUS, has grown to over 7,000 documents and was used for the selection of references for this reading list. Items chosen for this list are, in our judgement, among the key works in the field of photograph conservation.

References in Section X "Organization of Photographs" have been provided by Gerald Stone, Documentary Art and Photography Division, National Archives of Canada. They are part of a more extensive annotated bibliography found in the publication *Descriptive and subject cataloguing* (reference 3 in Section X).

Section XI contains publications by the American National Standards Institute that either deal with test methods for the properties of photographic materials or provide recommendations for storing them. A tutorial paper by P.Z. Adelstein gives an introduction to the subject.

I. History of Photography

1. 1985. Coote, J.H. "Some landmarks in the history of photofinishing." *Journal of Imaging Technology*. 11(3): 87-92.

2. 1985. Krause, P. "50 years of Kodachrome." *Modern Photography*. 49(11): 47-63, 83, 94, 96, 98, 104, 106, 108, 112, 114.

3. 1982. Gernsheim, H. *The origins of photography*. London: Thames and Hudson.

4. 1982. Newhall, B. *The history of photography from 1839 to the present*. New York: Museum of Modern Art.

5. 1981. Koshofer, G. *Farb Fotographie* [Colour photography]: *Band 1 — Alte Verfahren* [Historical processes]; *Band 2 — Moderne Verfahren* [Modern processes]; *Band 3 — Lexikon der Verfahren, Geräte und Materialien* [Dictionary of processes, equipment and materials]. Munich: Verlag Laterna magica.

6. 1979. Crawford, W. *The keepers of light; a history & working guide to early photographic processes*. Dobbs Ferry, NY: Morgan & Morgan.

7. 1979. Greenhill, R.; Birrell, A. *Canadian photography: 1839-1920*. Toronto: Coach House Press.

8. 1978. Eder, J.M. *History of photography*. Epstean, E., trans. New York: Dover Publications.

9. 1977. Hanson, W.T. "Forty years of color photography." *Photographic Science and Engineering*. 21(6): 293-296.

10. 1977. Pollack, P. *The picture history of photography from the earliest beginnings to the present day*. New York: Harry N. Abrams.

11. 1976. Staubach, H.W. "40 years of Kodachrome." *Popular Photography*. September: 110-111, 146-151, 188.

12. 1975. Jenkins, R.V. *Images and enterprise: technology and the American photographic industry, 1839 to 1925*. Baltimore: Johns Hopkins University Press.

13. 1972. Pouradier, J.; Trillat, J.J. "Histoire des sciences: sur le centenaire de la découverte du gélatino-bromure d'argent, l'oeuvre de Richard Leach Maddox." *Comptes rendus hebdomadaires des séance de l'Académie des sciences.* Paris: Académie des sciences: v. 274: 29-32.

14. 1970. Wall, E.J. *The history of three-color photography.* New York: Focal Press.

15. 1969. Gernsheim, H. and A. *The history of photography from the camera obscura to the beginning of the modern era.* New York: McGraw-Hill.

16. 1968. Friedman, J.S. *History of color photography.* New York: Focal Press.

17. 1964. Taft, R. *Photography and the American scene: a social history, 1839-1889.* New York: Dover Publications.

18. 1961. Mees, C.E.K. *From dry plates to Ektachrome film: a story of photographic research.* New York: Ziff-Davis.

19. 1960. Meyer, K. "Zur Geschichte des Agfacolor-Verfahrens" [On the history of the Agfacolor process]. *Bild und Ton.* 13(1-7):6-8; 37-39; 68-70, 86; 105-109; 140-142; 166-168; 205-206.

20. 1960. Wentzel, F. *Memoirs of a photochemist.* Philadelphia, PA: American Museum of Photography.

21. 1955. Matthews, G.E.; Tarkington, R.G. "Early history of amateur motion-picture film." *Journal of the Society of Motion Picture and Television Engineers.* 64 (March): 105-116.

22. 1954. Mees, C.E.K. "History of professional black-and-white motion-picture film." *Journal of the Society of Motion Picture and Television Engineers.* 63(October): 134-137.

23. 1951. Cornwell-Clyne, A. *Colour cinematography.* 3rd ed. London: Chapman & Hall.

24. 1951. Sipley, L.W. *A half century of color.* New York: Macmillan.

25. 1933. Theisen, E. "The history of nitrocellulose as a film base." *Journal of the Society of Motion Picture Engineers.* 20 (March): 259-262.

26. 1927. Eder, J.M. *Die Photographie mit dem Kollodiumverfahren* [Photography using collodion processes]. Halle (Saale): W. Knapp. (Ausführliches Handbuch der Photographie; v. 2, pt. 2).

II. Basic Photographic Technology

1. 1984. Reilly, J.M.; Kennedy, N.; Black, D.; Dam, T. Van. "Image structure and deterioration in albumen prints." *Photographic Science and Engineering*. 28(4): 166-171.

2. 1981. Adelstein, P.Z.; McCrea, J.L. "Stability of processed polyester base photographic films." *Journal of Applied Photographic Engineering*. 7(6): 160-167.

3. 1981. "The chemistry of art — a sequel." *Journal of Chemical Education*. 58(4): 291-332. A collection of articles by various authors available in a single reprint.

4. 1980. "The chemistry of art." *Journal of Chemical Education*. 57(4): 255-282. A collection of articles by various authors available in a single reprint.

5. 1980. Eaton, G.T. *Photographic chemistry in black-and-white and color photography*. 3rd rev. ed. Dobbs Ferry, NY: Morgan & Morgan.

6. 1980. Kolf, G. "Modern photographic papers." *British Journal of Photography*. 127(6244; 6245): 296-299; 316-319.

7. 1979. Parsons, T.F.; Gray, G.G.; Crawford, I.H. "To RC or not to RC." *Journal of Applied Photographic Engineering*. 5(2): 110-117.

8. 1978. Reilly, J.M. "The manufacture and use of albumen paper." *Journal of Photographic Science*. 26(4): 156-161.

9. 1966. Hill, T.T. "Laboratory-scale photographic emulsion technique." *Journal of Chemical Education*. 43(September): 492-498.

10. 1965. Adelstein, P.Z.; McCrea, J.L. "Permanence of processed estar polyester base photographic films." *Photographic Science and Engineering*. 9(5): 305-313.

11. 1965. Henn, R.W.; Mack, B.D. "A gold protective treatment for microfilm." *Photographic Science and Engineering*. 9(6): 378-384.

12. 1965. Veelen, G.F. van. "Morphologie, Farbe und Deckkraft des Silbers des photographischen Bildes" [Morphology, colour and covering power of silver in photographic pictures]. *Photographische Korrespondenz*. 101(10;11): 149-155; 165-172.

13. 1963. Henn, R.W.; Wiest, D.G. "Microscopic spots in processed microfilm: their nature and prevention." *Photographic Science and Engineering*. 7(5): 253-261.

14. 1962. Weyde, E. "Grösse und Form des entwickelten Silberkornes und seine Beziehungen zu bildwichtigen Eigenschaften" [Size and shape of developed silver grain and its relationship to image properties]. *Photographische Korrespondenz*. 98(1): 7-12.

15. 1957. Clerc, L.P. *La technique photographique*. Paris: Paul Montel.

16. 1955. White, D.R.; Gass, C.J.; Holm, W.R.; Meschter, E. "Polyester photographic film base." *Journal of the Society of Motion Picture and Television Engineers*. 64(December): 674-678.

17. 1950. Cummings, J.W.; Hutton, A.C.; Silfin, H. "Spontaneous ignition of decomposing cellulose nitrate film." *Journal of the Society of Motion Picture and Television Engineers*. 54(March): 268-274.

18. 1931. Carroll, B.H. "The preparation of photographic emulsions." *Journal of Chemical Education*. 8(12): 2341-2367.

19. 1930. Heyne, W. "Die Filmfabrikation" [The manufacture of photographic film]. *Erzeugung und Prüfung lichtempfindlicher Schichten Lichtquellen*. Wien: Verlag von Julius Springer: 248-279. (Handbuch der wissenschaftlichen und angewandten Photographie. v. 4).

20. 1930. Jahr, R. "Die Fabrikation der photographischen Trockenplatten" [The manufacture of photographic dry plates]. *Erzeugung und Prüfung lichtempfindlicher Schichten Lichtquellen*. Wien: Verlag von Julius Springer: 214-247. (Handbuch der wissenschaftlichen und angewandten Photographie. v. 4).

21. 1927. Sheppard, S.E. "The chemistry of photography: I. Historical considerations; II. The latent image; III. Development of negative and positive images." *Journal of Chemical Education*. 4(3; 4; 6): 298-312; 465-473; 749-757.

22. 1867. Schnauss, J. "Papier Leptographique." *Photographisches Archiv*. 8(122): 21-22.

III. Structure and Properties of Photographic Materials

1. 1986/1987. Hendriks, K.B. "Notes on microfilm." *Archivaria*. No. 23(Winter): 179-184.

2. 1984. Barger, M.S.; White, W.B. "Optical characterization of the daguerreotype." *Photographic Science and Engineering*. 28(4): 172-174.

3. 1984. Hendriks, K.B.; Lesser, B.; Stewart, J.; Nishimura, D. "Properties and stability of gelatin layers in photographic materials." *American Institute for Conservation of Historic and Artistic Works, preprints of papers presented at the twelfth annual meeting, Los Angeles, California, 15-20 May, 1984*. Washington, DC: AIC: 52-62.

4. 1984. Reilly, J.M.; Kennedy, N.; Black, D.; Dam, T. Van. "Image structure and deterioration in albumen prints." *Photographic Science and Engineering*. 28(4): 166-171.

5. 1982. Barger, M.S.; Messier, R.; White, W.B. "A physical model for the daguerreotype." *Photographic Science and Engineering*. 26(6): 285-291.

6. 1981. Feldman, L.H. "Discoloration of black-and-white photographic prints." *Journal of Applied Photographic Engineering*. 7(1): 1-9.

7. 1981. Kasper, K.B.; Wanka, R. "Chemical formulations and requirements of photographic paper." *Journal of Applied Photographic Engineering*. 7(3): 67-72.

8. 1981. Woodward, A.I. "The evolution of photographic base papers." *Journal of Applied Photographic Engineering*. 7(4): 117-120.

9. 1977. Adelstein, P.Z.; McCrea, J.L. "Dark image stability of diazo films." *Journal of Applied Photographic Engineering*. 3(3): 173-178.

10. 1977. Kurttila, K.R. "Dry silver film stability." *Journal of Micrographics*. 10(3): 113-117.

11. 1972. Adelstein, P.Z. "Stability of processed diazo and vesicular films." *Micro-News Bulletin.* 1(August): 9.

12. 1968. Fritsche, K. *Faults in photography: causes and correctives.* Mannheim, L.A., trans. New York: Focal Press.

13. 1965. Henn, R.W.; Wiest, D.G.; Mack, B.D. "Microscopic spots in processed microfilm: the effect of iodide." *Photographic Science and Engineering.* 9(3): 167-173.

14. 1965. James, T.H. "The stability of silver filaments." *Photographic Science and Engineering.* 9(2): 121-132.

15. 1964. Anderson, M.G.; Wagner, V.L., Jr. "Stability of vesicular microfilm images." *Photographic Science and Engineering.* 8(6): 353-358.

16. 1963. Henn, R.W.; Wiest, D.G. "Microscopic spots in processed microfilm: their nature and prevention." *Photographic Science and Engineering.* 7(5): 253-261.

17. 1960. Adelstein, P.Z.; Calhoun, J.M. "Interpretation of dimensional changes in cellulose ester base motion-picture films." *Journal of the Society of Motion Picture and Television Engineers.* 69(March): 157-163.

18. 1959. Calhoun, J.M.; Leister, D.A. "Effect of gelatin layers on the dimensional stability of photographic film." *Photographic Science and Engineering.* 3(1): 8-17.

19. 1955. Carroll, J.F.; Calhoun, J.M. "Effect of nitrogen oxide gases on processed acetate film." *Journal of the Society of Motion Picture and Television Engineers.* 64(September): 501-507.

20. 1955. Fordyce, C.R.; Calhoun, J.M.; Moyer, E.E. "Shrinkage behavior of motion-picture film." *Journal of the Society of Motion Picture and Television Engineers.* 64(February): 62-66.

21. 1948. Fordyce, C.R. "Improved safety motion picture film support." *Journal of the Society of Motion Picture Engineers.* 51(4): 331-350.

22. 1944. Calhoun, J.M. "The physical properties and dimensional behavior of motion picture film." *Journal of the Society of Motion Picture Engineers.* 43(4): 227-266.

23. 1938. Maurer, J.A.; Bach, W. "The shrinkage of acetate-base motion picture films." *Journal of the Society of Motion Picture Engineers*. 31(July-December): 15-27.

24. 1930. Trumm, A. "Die Herstellung photographischer Papiere" [The manufacture of photographic papers]. *Erzeugung und Prüfung lichtempfindlicher Schichten Lichtquellen*. Wien: Verlag von Julius Springer: 280-328. (Handbuch der wissenschaftlichen und angewandten Photographie. v. 4).

25. 1927. Sheppard, S.E. "Behavior of gelatin in the processing of motion picture film." *Transactions of the Society of Motion Picture Engineers*. 11(32): 707-727.

IV. Identification and Dating of Photographic Records

1. 1986. Reilly, J.M. *Care and identification of 19th-century photographic prints.* Rochester, NY: Eastman Kodak Company. (Kodak publications; no. G-2S).

2. 1983. Coe, B.; Haworth-Booth, M. *A guide to early photographic processes.* London: Victoria and Albert Museum.

3. 1978. Gill, A.T. *Photographic processes, a glossary and a chart for recognition.* London: Museums Association. (Museums Association information sheets; no. 21).

4. 1978. Katcher, P. "How to date an image from its mat." *PSA Journal.* 44(8): 26.

5. 1978. Scheinmann, D. "How to date the carte de visite." *PSA Journal.* 44(9): 22-23.

6. 1977. Baragwanath, A.K. "Dating photographs." *Curator.* 20(1): 42-47.

7. 1974. Pilling, A.R. "Dating early photographs by card mounts and other external evidence: tentative suggestions." *Image.* 17(1): 11-16.

8. 1972. Zucker, H. "Old-time processes — how to identify and date them." *Popular Photography.* December: 99-101, 170, 216.

V. Conservation of Photographic Materials

1. 1987. Hendriks, K.B. "Storage and handling of photographic materials." Smith, M.A., ed. *Preservation of library materials, conference held at the National Library of Austria, April 7-10, 1986*. Munich: K.G. Saur; v. 2: 55-66.

2. 1986. Fédération internationale des archives du film. *Preservation and restoration of moving images and sound*. Brussels: FIDA.

3. 1986. Hendriks, K.B. *Storage and care of photographs*. New York: New York State Conservation Consultancy, Cooper-Hewitt Museum. (New York State Conservation Consultancy bulletins; no. 16).

4. 1986. National Research Council. *Preservation of historical records*. Washington, DC: National Academy Press.

5. 1986. Public Archives of Canada. Picture Conservation Division. *Care of encased photographic images*. Ottawa: Canadian Conservation Institute. (CCI notes; no. 16/1).

6. 1986. Public Archives of Canada. Picture Conservation Division. *Care of black-and-white photographic glass plate negatives*. Ottawa: Canadian Conservation Institute. (CCI notes; no. 16/2).

7. 1986. Public Archives of Canada. Picture Conservation Division. *Care of black-and-white photographic negatives on film*. Ottawa: Canadian Conservation Institute. (CCI notes; no. 16/3).

8. 1986. Public Archives of Canada. Picture Conservation Division. *Care of black-and-white photographic prints*. Ottawa: Canadian Conservation Institute. (CCI notes; no. 16/4).

9. 1986. Public Archives of Canada. Picture Conservation Division. *Care of colour photographic materials*. Ottawa: Canadian Conservation Institute. (CCI notes; no. 16/5).

10. 1986. Public Archives of Canada. Picture Conservation Division. *Processing contemporary black-and-white photographic films and papers.* Ottawa: Canadian Conservation Institute. (CCI notes; no. 16/6).

11. 1985. *Conservation et restauration du patrimoine photographique : Actes du colloque de novembre 1984 organisé dans le cadre du Mois de la Photo à Paris par l'Atelier de Restauration de Photographies de la Ville de Paris avec la participation de l'École Nationale de la Photographie.* Paris: Audiovisuel.

12. 1985. Eastman Kodak Company. *Conservation of photographs.* Rochester, NY: Eastman Kodak Company. (Kodak publications; no. F-40).

13. 1985. Kopperl, D.F.; Bard, C.C. "Freeze/thaw cycling of motion picture films." *SMPTE Journal.* 94(8): 826-827.

14. 1984. Hendriks, K.B. *The preservation and restoration of photographic materials in archives and libraries: a RAMP study with guidelines.* Paris: UNESCO. (PGI-84/WS/1).

15. 1984. Ritzenthaler, M.L.; Munoff, G.J.; Long, M.S. *Archives and manuscripts: administration of photographic collections.* Chicago: Society of American Archivists. (SAA basic manual series).

16. 1983. Eastman Kodak Company. *The book of film care.* Rochester, NY: Eastman Kodak Company. (Kodak publications; no. H-23).

17. 1983. Hendriks, K.B.; Lesser, B. "Disaster preparedness and recovery: photographic materials." *American Archivist.* 46(1): 52-68.

18. 1983. Mathey, G. et al. *Air quality criteria for storage of paper-based archival records.* Washington, DC: National Bureau of Standards. (NBSIR 83-2795).

19. 1983. Polaroid Corporation. *Storing, handling, and preserving Polaroid photographs: a guide.* Toronto: Focal Press.

20. 1982. Hendriks, K.B. "The conservation of photographic materials." *Picturescope.* 30(1): 4-9.

21. 1982. Padfield, T.; Erhardt, D.; Hopwood, W. "Trouble in store." *Science and technology in the service of conservation, 1982, IIC preprints.* London: International Institute for Conservation of Historic and Artistic Works: 24-27.

22. 1982. *Caring for photographs: display, storage, restoration.* New York: Time-Life Books. (Life library of photography).

23. 1981. Gillet, M.; Garnier, C.; Flieder, F. "Influence de l'environnement sur la conservation des documents photographiques modernes." *Les documents graphiques et photographiques: analyse et conservation.* Paris: Éditions du Centre national de la recherche scientifique: 93-109.

24. 1981. Rinhart, F.; Rinhart, M. *The American daguerreotype.* Athens, GA: University of Georgia Press.

25. 1979. Swan, A.; Fiori, C.E.; Heinrich, K.F.J. "Daguerreotypes: a study of the plates and the process." *Scanning electron microscopy.* AMF O'Hare, IL: SEM Inc.: 411-424.

26. 1978. Adelstein, P.Z. "Preservation of microfilm." *Journal of Micrographics.* July/August: 333-337.

27. 1978. Pobboravsky, I. "Daguerreotype preservation: the problems of tarnish removal." *Technology and Conservation.* 3(2): 40-45.

28. 1978. Swan, A. "Conservation treatments for photographs: a review of some of the problems, literature and practices." *Image.* 21(2): 24-31.

29. 1977. Schwarz, D. ed. *Conservation des images fixes.* Prepared with the assistance of the Commission de Conservation d'Interphotothèque. Paris: Documentation française. (Guide pratique des photothèques; no. 3).

30. 1977. Weinstein, R.A.; Booth, L. *Collection, use and care of historical photographs.* Nashville, TN: American Association for State and Local History.

31. 1976. Bovis, M. "À propos de la restauration et de la conservation des daguerréotypes." *Photo-Revue.* January: 58.

32. 1976. Hannavy, J. "The magnificent ambrotypes." *British Journal of Photography.* 123(8): 153-155.

33. 1976. Ostroff, E. *Conserving and restoring photographic collections.* Washington, DC: American Association of Museums.

34. 1975. Hannavy, J. "The lowly tintype." *British Journal of Photography*. 122(6023): 1168-1170.

35. 1974. National Fire Protection Association. *Standard for storage and handling of cellulose nitrate motion picture film, 1974*. Boston: National Fire Protection Association. (NFPA no. 40).

36. 1973. Montuori, T.R. "Lessons learned from Agnes." *Journal of Micrographics*. 6(3): 133-136.

37. 1973. Montuori, T.R. "Salvaging damaged microfilm." *Microfilm Techniques*. n.v.: 10, 18.

38. 1972. Weyde, E. "A simple test to identify gases which destroy silver images." *Photographic Science and Engineering*. 16(4): 283-286.

39. 1971. Bovis, M. "Les anciens procédés photographiques: V. Amphitypie, ferrotypie, collodion sec." *Photo-Ciné-Revue*. October: 450-453.

40. 1971. Bovis, M. "Les anciens procédés photographiques: 1. La découverte et le daguerréotype." *Photo-Ciné-Revue*. April: 176-180.

41. 1971. Flink, J.; Hoyer, H. "Conservation of water-damaged written documents by freeze-drying." *Nature*. 234(December): 420.

42. 1971. Pobboravsky, I. *Study of iodized daguerreotype plates*. Rochester, NY: Rochester Institute of Technology.

43. 1970. Eaton, G.T. "Preservation, deterioration and restoration of photographic images." *Library Quarterly*. 40(1): 85-98.

44. 1970. McCamy, C.S.; Pope, C.I. "Redox blemishes — their cause and prevention." *Journal of Micrographics*. 3(4): 165-170.

45. 1969. McCamy, C.S.; Wiley, S.R.; Speckman, J.A. "A survey of blemishes on processed microfilm." *Journal of Research of the National Bureau of Standards — A. Physics and Chemistry*. 73A(1): 79-97. Plus one worksheet and report form on two pages following the article.

46. 1967. Ostroff, E. "Preservation of photographs." *Photographic Journal*. October: 309-314.

47. 1967. Pouradier, J.; Hodot-Mailliet, A.M.; Rigola, J. "Conservation des documents photographiques sur papier. II. Influence des conditions de traitement sur la stabilité de l'image." *Science et Industries photographiques.* 38(1): 1-7.

48. 1965. Pouradier, J.; Mailliet, A.M. "Conservation des documents photographiques sur papier. I. Influence du thiosulfate résiduel et des conditions de stockage." *Science et Industries photographiques.* 36(2/3): 29-42.

49. 1964. McCamy, C.S. *Inspection of processed photographic record films for aging blemishes.* Washington, DC: National Bureau of Standards. (National Bureau of Standards handbooks; no. 96).

50. 1960. Calhoun, J.M. "Technology of new film bases." *Perspective.* 2(3): 250-256.

51. 1960. Henn, R.W.; Olivares, I.A. "Tropical storage of processed negatives." *Photographic Science and Engineering.* 4(4): 229-233.

52. 1958. Hutchison, G.L.; Ellis, L.; Ashmore, S.A. "The surveillance of cinematograph record film during storage." *Journal of Applied Chemistry.* 8(January): 24-34.

53. 1958. Newhall, B. "Ambrotype: a short and unsuccessful career." *Image.* 7(October): 171-177.

54. 1953. Calhoun, J.M. "Storage of nitrate amateur still-camera film negatives." *Journal of the Biological Photographic Association.* 21(3): 1-13.

55. 1952. Calhoun, J.M. "Cold storage of photographic film." *Photographic Science and Technique,* Section B of *PSA Journal.* 18B(October): 1-4.

56. 1939. Scribner, B.W. *Summary report of research at the National Bureau of Standards on the stability and preservation of records on photographic film.* Washington, DC: National Bureau of Standards. (National Bureau of Standards miscellaneous publications; no. M162).

57. 1923. Deck, N.C. "The permanence of photographic prints as tested by tropical climates." *British Journal of Photography.* 70(3284): 222-223.

58. 1892. Gladstone, J.S. "Fugacity of bromide prints." *British Journal of Photography.* July 29: 484.

59. 1879. Heighway, W. "The ferrotype." *The Practical Photographer.* 3(7): 686-688.

60. 1872. Estabrooke, E.M. *The ferrotype and how to make it.* 1972 reprint. Hastings-on-Hudson, NY: Morgan & Morgan.

61. 1866. Lea, M.C. "An examination into the circumstances under which silver is found in the whites of albumen prints." *Photographic News.* 10(415; 416): 394-395; 402-403.

62. 1863. Spiller, J. "Silver in the whites of albumenized prints." *Photographic News.* 7(February 6): 63-64.

63. 1855. Delamotte, P.H. et al. "First report of the committee appointed to take into consideration the question of the fading of positive photographic pictures upon paper." *Journal of the Photographic Society.* 36(November 21): 251-252.

64. 1839. Daguerre, L.J.M. "Practical description of the process called the daguerreotype, which consists in the spontaneous reproduction of the images of natural objects, in the camera obscura; not with their colours, but with great delicacy in the gradation of tints." Frazer, J.F., trans. *Journal of the Franklin Institute.* 24: 303-311.

VI. Duplication and Copying

1. 1987. Eastman Kodak Company. *Kodak professional black-and-white films.* Rochester, NY: Eastman Kodak Company. (Kodak publications; no. F-5).

2. 1986. Hendriks, K.B.; Madeley, D.R.; Toll, F.; Thurgood, B. "The duplication of historical black-and-white negatives." *Journal of Imaging Technology.* 12(4): 185-199.

3. 1985. Eastman Kodak Company. *Quality enlarging with Kodak black-and-white papers.* Rochester, NY: Eastman Kodak Company. (Kodak publications; no. G-1).

4. 1984. Eastman Kodak Company. *Copying and duplicating in black-and-white and color.* Rochester, NY: Eastman Kodak Company. (Kodak publications; no. M-1).

5. 1984. Eggleston, J. *Sensitometry for photographers.* London: Focal Press.

6. 1981. Todd, H.N.; Zakia, R.D. *Photographic sensitometry: the study of tone reproduction.* 2nd ed. Dobbs Ferry, NY: Morgan & Morgan.

7. 1950. Rudd, R.G. "Copying the black-and-white print." *Photographic Science and Technique,* Section B of *PSA Journal.* 16B(June): 30-38.

8. 1930. Eder, J.M.; Lüppo-Cramer, H. *Verarbeitung der photographischen Platten, Filme und Papiere* [The processing of photographic plates, films and papers]. Halle (Saale): W. Knapp. (Ausführliches Handbuch der Photographie; v. 3, pt. 2).

VII. Processing of Black-and-White Films and Papers

1. 1986. Drago, F.J.; Lee, W.E. "Review of the effects of processing on the image stability of black-and-white silver materials." *Journal of Imaging Technology.* 12(1): 57-65.

2. 1986. Kopperl, D.F.; Huttemann, T.J. "Effect of residual thiosulfate ion on the image stability of microfilms." *Journal of Imaging Technology.* 12(4): 173-180.

3. 1985. Eastman Kodak Company. *Black-and-white processing using Kodak chemicals.* Rochester, NY: Eastman Kodak Company. (Kodak publications; no. J -1).

4. 1985. Eastman Kodak Company. *Finishing prints on Kodak water-resistant papers.* Rochester, NY: Eastman Kodak Company. (Kodak publications; no. E-67).

5. 1985. Eastman Kodak Company. *Practical densitometry.* Rochester, NY: Eastman Kodak Company. (Kodak publications; no. E-59).

6. 1984. Drago, F.J.; Lee, W.E. "Stability and restoration of images on Kodak professional B/W duplicating film/4168." *Journal of Imaging Technology.* 10(3): 113-118.

7. 1984. Lee, W.E.; Drago, F.J.; Ram, A.T. "New procedures for processing and storage of Kodak spectroscopic plates type IIIa-J." *Journal of Imaging Technology.* 10(1): 22-28.

8. 1984. Lee, W.E.; Wood, B.; Drago, F.J. "Toner treatments for photographic images to enhance image stability." *Journal of Imaging Technology.* 10(3): 119-126.

9. 1983. Adams, A. *The negative.* Boston: Little, Brown, and Company.

10. 1983. Adams, A. *The print.* Boston: Little, Brown, and Company.

11. 1983. Eastman Kodak Company. *Kodak neutral density attenuators*. Rochester, NY: Eastman Kodak Company. (Kodak publications; no. P-114).

12. 1981. Eastman Kodak Company. *Processing and process monitoring of Kodak black-and-white films*. Rochester, NY: Eastman Kodak Company. (Kodak publications; no. Z-126).

13. 1981. Mason, L.F.A.; Gent, M.H.; Parsons, R.R. "Processing black-and-white prints on paper base for permanence." *Journal of Applied Photographic Engineering*. 7(2): 64-66.

14. 1977. Hendriks, K.B. "Archival processing: how to make a lasting impression on history." *Canadian Photography*. 7(12): 22-25; 32.

15. 1974. Crawley, G. "Ilfospeed system." *British Journal of Photography*. 39(27 September): 849-851.

16. 1972. Pouradier, J. "Dosage du thiosulfate résiduel dans les films et plaques photographiques." *Informations de la Société française de photographie*. 10(December): 1-3.

17. 1965. Henn, R.W.; Mack, B.D. "A gold protective treatment for microfilm." *Photographic Science and Engineering*. 9(6): 378-384.

18. 1953. Crabtree, J.I.; Henn, R.W.; Edgerton, R.F. "Two-bath fixation of prints." *Photographic Science and Technique*, Section B of *PSA Journal*. 19B(February): 10-16.

19. 1943. Crabtree, J.I.; Eaton, G.T.; Muehler, L.E. "Fixing and washing for permanence." *PSA Journal*. 9(3; 4): 115-123; 162-170, 192.

20. 1936. Formstecher, F. "Zur Geschichte und Theorie der Selentonung" [The history and theory of selenium toning]. *Photographische Industrie*. 34: 1014-1018.

21. 1924. Lumière, A.; Lumière, L.; Seyewetz, A. "The time of fixing of development papers." *British Journal of Photography*. 71(February 22): 108-109.

22. 1879. "Some peculiarities of toning." *British Journal of Photography*. 26(1012): 455-456.

VIII. Colour Photographic Materials

1. 1986. Hagen, R. "Further improvements in the permanence of Cibachrome materials under adverse display conditions." *Journal of Imaging Technology.* 12(3): 160-162.

2. 1986. Nickel, U. "The influence of deamination on the stability of photographic dyes." *Journal of Imaging Technology.* 12(4): 181-184.

3. 1985. Bermane, D. "Influence of azo-dye aggregation on the dark stability of Cibachrome images." *Journal of Imaging Technology.* 11(3): 105-108.

4. 1985. Heidke, R.L.; Feldman, L.H.; Bard, C.C. "Evolution of Kodak photographic color negative print papers." *Journal of Imaging Technology.* 11(3): 93-97.

5. 1985. Koboshi, S.; Kurematsu, M. "A new stabilization process for color films and prints using Konica Super Stabilizer." *Society of Photographic Scientists and Engineers second international symposium: the stability and preservation of photographic images, printing of transcript summaries; 1985 August 25-28; Ottawa, Canada.* Springfield, VA: Society of Photographic Scientists and Engineers: 350-375.

6. 1985. Krause, P. "Preservation of autochrome plates in the collection of the National Geographic Society." *Journal of Imaging Science.* 29(5): 182-192.

7. 1985. Krause, P. "The stability of color prints." *Technical Photography.* 17(7): 28-31, 58-59.

8. 1984. Seoka, Y. "Shashin gazo hozon jotai no kaiseki" [Analytical study on storage and display of photographic images]. *Nihon Shashin Gakkaishi.* 47(1): 14-17.

9. 1983. Meyer, A. "Silver dye-bleach color microfilm." *Journal of Applied Photographic Engineering.* 9(4): 117-119.

10. 1983. Meyer, A.; Bermane, D. "The stability and permanence of Cibachrome images." *Journal of Applied Photographic Engineering.* 9(4): 121-125.

11. 1983. Schrock, N.C.; Sundt, C.L. "Slides." In: Swartzburg, S.G., ed. *Conservation in the Library*. Westport, CT: Greenwood Press: 103-128.

12. 1982. Carl, K.J., Jr.; Erwin, J.W.; Powell, S.J.; Reinking, F.R.; Sehlin, R.C.; Spakowsky, S.W.; Szafranski, W.A.; Wien, R.W. "Eastman color print film 5384." *SMPTE Journal*. 91(12): 1161-1170.

13. 1982. Schwalberg, B. "Color preservation update." *Popular Photography*. 89(1): 81-85, 131.

14. 1982. Seoka, Y.; Kubodera, S.; Aono, T.; Hirano, M. "Some problems in the evaluation of color image stability." *Journal of Applied Photographic Engineering*. 8(2): 79-82.

15. 1981/82. Sundt, C.L. "Mounting slide film between glass — for preservation or destruction?" *Visual Resources*. 2(1/2/3): 37-62.

16. 1981. Eastman Kodak Company. *Evaluating dye stability of Kodak color products*. Rochester, NY: Eastman Kodak Company. (Kodak publications; CIS no. 50).

17. 1981. Wilhelm, H. "Monitoring the fading and staining of color prints." *Journal of the American Institute for Conservation*. 21: 49-64.

18. 1980. Bard, C.C.; Larson, G.W.; Hammond, H.; Packard, C. "Predicting long-term dark storage dye stability characteristics of color photographic products from short-term tests." *Journal of Applied Photographic Engineering*. 6(2): 42-45.

19. 1979. Tuite, R.J. "Image stability in color photography." *Journal of Applied Photographic Engineering*. 5(4): 200-207.

20. 1978. Wilhelm, H. "Storing color materials: frost-free refrigerators offer a low-cost solution." *Industrial Photography*. 27(10): 32-35.

21. 1976. Smith, W.F., Jr.; Herkstroeter, W.G.; Eddy, K.L. "Mechanistic pathways for visible light fading of pyrazolone azomethine dyes in oil-in-gelatin dispersions." *Photographic Science and Engineering*. 20(3): 140-148.

22. 1974. Bermane, D. "On the resistance to fading of silver dye bleach transparencies." *Journal of Photographic Science*. 22(2): 84-92.

23. 1974. Rogers, H.G.; Idelson, M.; Cieciuch, R.F.W.; Bloom, S.M. "Light stability of new Polaroid colour prints." *Journal of Photographic Science.* 22(3): 138-142.

24. 1973. Giles, C.H.; Forrester, S.D.; Haslam, R.; Horn, R. "Light fastness evaluation of colour photographs." *Journal of Photographic Science.* 21(1): 19-23.

25. 1970. Adelstein, P.Z.; Graham, C.L.; West, L.E. "Preservation of motion-picture color films having permanent value." *Journal of the Society of Motion Picture and Television Engineers.* 79(11): 1011-1018.

26. 1967. Hubbell, D.C.; McKinney, R.G.; West, L.E. "Methods for testing image stability of color photographic products." *Photographic Science and Engineering.* 11(5): 295-305.

27. 1965. Gröger, R.; Pietrzok, H. "Über die Beständigkeit gelber Azomethinfarbstoffe" [On the stability of yellow azomethine dyes]. *Veröffentlichungen der wissenschaftlichen Photo-Laboratorien — Wolfen.* 10: 309-315.

28. 1965. Traue, S.; Schmidt, S.; Pietrzok, H. "Beständigkeit von Azofarbstoffen von lange alkylreste enthaltenden 5-Pyrazolonen und 1-Hydroxy-2-naphthoesäureamiden" [Permanence of azo dyes of 5-pyrazolones and 1-hydroxy-2-amides containing long alkyl chains]. *Veröffentlichungen der wissenschaftlichen Photo-Laboratorien — Afga.* 10: 301-308.

29. 1961. Gröger, R. "Die Bestimmung der Hydrolysebeständigkeit und Lichtechtheit der Bildfarbstoffe des Agfacolor-materials" [The determination of the stability towards hydrolysis and of the light-fastness of image dyes in Agfacolor materials]. *Veröeffentlichungen der wissenschaftlichen Photo-Laboratorien — Afga.* 9: 128-132.

30. 1961. Widmayer, W. "Cold storage protects color negatives." *American Cinematographer.* 42: 170-172, 174.

31. 1955. Meyer, K. "Zur altersbedingten Veränderung der Farbenwerte von Farbenfotos" [On colour shifts in colour photographs caused by aging]. *Bild und Ton.* 8(6): 158-159.

32. 1951. Hedden, W.; Weaver, T.; Thompson, L. "Processing 16-mm Kodachrome prints." *Journal of the Society of Motion Picture and Television Engineers.* 57(October): 308-315.

33. 1944. Schneider, W.; Fröhlich, A.; Schulze, H. "Die diffusionsechten Farbbildner des Agfacolorfilms" [The non-diffusing dye couplers in Agfacolor films]. *Die Chemie*. 57(17/20): 113-116.

34. 1942. Mees, C.E.K. "Direct processes for making photographic prints in color." *Journal of the Franklin Institute*. 233(January): 41-50.

35. 1936. Davies, E.R. "The Kodachrome process of 16 mm. colour kinematography." *Photographic Journal*. 76(April): 248-253.

36. 1935. Mannes, L.D.; Godowsky, L. "The Kodachrome process for amateur cinematography in natural colors." *Journal of the Society of Motion Picture Engineers*. 25(July): 65-68.

37. 1935. Mees, C.E.K. "Eastman Kodak Company announces Kodachrome process." *International Photographer*. May: 16-17, 20.

38. 1914. Fischer, R.; Siegrist, H. "Über die Bildung von Farbstoffen durch Oxydation mittels belichteten Halogensilbers" [On the formation of dyes through oxidation by means of exposed silver halide]. *Photographische Korrespondenz*. 640; 644: 18-22; 208-211.

IX. Conservation Treatments

1. 1987. Hendriks, K.B.; Ross, L. "Further experiments on the restoration of discoloured black-and-white photographic images in chemical solutions." *ICOM Committee for Conservation, 8th triennial meeting, Sydney, Australia, 7-11 September 1987, preprints.* Paris: International Council of Museums: 667-669.

2. 1986. Cowan, J. *Dry methods for surface cleaning of paper.* Ottawa: Canadian Conservation Institute. (CCI technical bulletins: no. 11).

3. 1986. Gillet, M.; Garnier, C.; Flieder, F. "Glass plate negatives: preservation and restoration." *Restaurator.* 7(2): 49-80.

4. 1985. Hendriks, K.B. "Experiments on the restoration of discoloured black-and-white photographs in chemical solutions." *Society of Photographic Scientists and Engineers, second international symposium: the stability and preservation of photographic images, printing of transcript summaries; 1985 August 24-28; Ottawa, Canada.* Springfield, VA: Society of Photographic Scientists and Engineers: 148-163.

5. 1984. Hendriks, K.B.; Tom, B.L.; Sergeant, C.; Evans, C.; Melnick, J.; Poitras, P.; Nishimura, D. "Experiments on the restoration of discoloured black-and-white photographs in chemical solutions." *ICOM Committee for Conservation, 7th triennial meeting, Copenhagen, 10-14 September 1984, preprints.* Paris: International Council of Museums: v. 2, 84.14.34-84.14.37.

6. 1984. Johnsen, J.S. "Die Restaurierung vergilbter Zellulosenitrat — und Glasplattennegative" [The restoration of yellowed negatives on cellulose nitrate and glass plates]. *Maltechnik Restauro.* no. 1(January): 57-72.

7. 1984. Koch, M.S.; Sjogren, A. "Behandlung von Daguerreotypien mit Wasserstoffplasma" [Treatment of daguerreotypes with hydrogen plasma]. *Maltechnik Restauro.* no. 4(October): 58-64.

8. 1983. Rempel, S. "Preparation of a calotype waxed paper negative for patron use." In: Morrow, C.C. *The preservation challenge: a guide to conserving library materials.* White Plains, NY: Knowledge Industry Publications: 151-153.

9. 1981. Smith, M.A. *Matting and hinging works of art on paper*. Washington, DC: Library of Congress.

10. 1977. Gear, J.L.; MacClaren, R.H.; McKiel, M. "Film recovery of some deteriorated black and white negatives." *American Archivist*. 40(3): 363-368.

11. 1952. Eastman Kodak Company. *Stains on negatives and prints*. Rochester, NY: Eastman Kodak Company. (Kodak photographic notebooks; no. J-18).

12. 1951. Henn, R.W.; Crabtree, J.I.; Russell, H.D. "An ammonium hypo reducer." *Photographic Science and Technique*, Section B of *PSA Journal*. 17B(November): 110-113.

13. 1927. Wall, E.J. *Intensification and reduction: a critical résumé of all known methods*. Boston: American Photographic Publishing.

14. 1921. Crabtree, J.I. "Stains on negatives and prints: their cause, prevention and removal." *American Annual of Photography*. 35: 204-240.

15. 1920. Stenger, E. *Wiederherstellung alter photographischer Bilder und Reproduktion derselben im ursprünglichen und in neuzeitlichen Verfahren* [The restoration of old photographic pictures and the reproduction of same in old and new ways]. Halle (Saale): Verlag von Wilhelm Knapp. (Enzyklopädie der Photographie; Heft 97).

X. Organization of Photographs

1. 1987. Vogt, D.L. *Smithsonian Archives photo survey project: a draft photographic thesaurus.* Washington, DC: Smithsonian Institution Archives.

2. 1986. Zinkham, H.; Parker, E.B., comps. *Descriptive terms for graphic materials: genre and physical characteristic headings.* Washington, DC: Library of Congress.

3. 1985. National Photography Collection. *Descriptive and subject cataloguing.* Ottawa: Public Archives of Canada.

4. 1984. Pitts, T.; Denton, S. *CREATE: a procedure manual for cataloging photographs.* 2nd ed. Tucson: Center for Creative Photography, University of Arizona.

5. 1984. Ritzenthaler, M.L.; Munoff, G.J.; Long, M.S. *Archives and manuscripts: administration of photographic collections.* Chicago: Society of American Archivists. (SAA basic manual series).

6. 1982. Betz, E.W., comp. *Graphic materials: rules for describing original items and historical collections.* Washington , DC: Library of Congress.

7. 1982. Dryden, J.E. *Images in time: a basic guide to the processing and preservation of historical photographs.* Edmonton: ACCESS, Alberta Educational Communications Corporation.

8. 1981. Harrison, H.P., ed. *Picture librarianship.* Phoenix, AZ: Oryx Press.

9. 1980. Betz, E.W. *Subject headings used in the Library of Congress Prints and Photographs Division.* Washington, DC: Library of Congress.

10. 1980. Evans, H. *Picture librarianship.* New York: K.G. Saur; London: Clive Bingley. (Outlines of modern librarianship.)

11. 1980. Maounis, J., comp. "Cataloging historical photographs: a select bibliography." *Picturescope.* 28(Winter): 21.

12. 1980. Vogt, D.L. *The administration of photographic collections: a speech outline . . . for the American Association for State and Local History 1980 seminar on the administration of photographic collections, March 17-20, the Oakland Museum, Oakland, California.*

13. 1979. National Library of Canada. Canadian MARC Office. *Canadian MARC communication format: monographs.* Ottawa: National Library of Canada. A 1985 update is available in which audio-visual materials were renamed visual materials to reflect the extension of the specifications to accommodate two-dimensional materials.

14. 1978. Betz, E.W. "Organization and cataloging of pictorial material in the Library of Congress Prints and Photographs Division." Washington, DC. A working paper, not an official publication.

15. 1978. Eskind, A.H.; Barsel, D. "International Museum of Photography at George Eastman House: conventions for cataloging photographs." *Image.* 21(December): 1-31.

16. 1978. Gorman, M.; Winkler, P.W.; eds. *Anglo-American cataloguing rules.* 2nd ed. Chicago: American Library Association; Ottawa: Canadian Library Association: Chapter 8.

17. 1972. Shaw, R.V. "Picture organization: practices and procedures. Parts 1 and 2." *Special Libraries.* 63(October; November): 448-456; 502-506.

XI. Publications by the American National Standards Institute (ANSI) on the Preservation and Storage of Photographic Materials

1. 1988. American National Standards Institute. *American national standard for imaging media (film) — ammonia-processed diazo films — specifications for stability.* ANSI IT9.5-1988. New York: American National Standards Institute.

2. 1988. American National Standards Institute. *American national standard for imaging media (film) — silver-gelatin type — specifications for stability.* ANSI IT9.1-1988. New York: American National Standards Institute.

3. 1986. Adelstein, P.Z. "Status of permanence standards." *Journal of Imaging Technology.* 12(1): 52-56.

4. 1986. American National Standards Institute. *American national standard for photography (processing) — methods for evaluating processing with respect to the stability of the resultant image — black-and-white papers* . ANSI PH4.32-1986. New York: American National Standards Institute.

5. 1986. American National Standards Institute. *American national standard for photography (processing) — processed films, plates, and papers — filing enclosures and containers for storage.* ANSI PH1.53-1986. New York: American National Standards Institute. (Will become IT9.2 when revision is approved).

6. 1985. American National Standards Institute. *American national standard for photography (chemicals) — residual thiosulfate and other chemicals in films, plates, and papers — determination and measurement.* ANSI PH4.8-1985. New York: American National Standards Institute.

7. 1985. American National Standards Institute. *American national standard for photography (film) — processed safety film — storage.* ANSI PH1.43-1985. New York: American National Standards Institute. (Transferred to IT9 but no designation number given as yet).

8. 1982. American National Standards Institute. *American national standard for photography (film and slides) — black-and-white photographic paper prints — practice for storage.* ANSI PH1.48-1982 (R1987). American National Standards Institute. (Transferred to IT9 but no designation number given as yet).

9. 1981. American National Standards Institute. *Practice for storage of processed photographic plates.* ANSI PH1.45-1981. New York: American National Standards Institute. (Will become IT9.6 when revision is approved).

10. 1979. American National Standards Institute. *Specifications for thermally-activated dry-mounting tissue for mounting photographs.* ANSI PH4.21-1979. New York: American National Standards Institute. (Under revision).

11. 1969. American National Standards Institute. *Method for comparing the color stabilities of photographs.* ANSI PH1.42-1969 (R1987). New York: American National Standards Institute. (Transferred to IT9 but no designation number given as yet).

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La conservation des documents photographiques

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Liste d'ouvrages de référence de base

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Klaus B. HENDRIKS
et
Anne WHITEHURST

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Avant-propos

Cette liste d'ouvrages de référence a le double objet suivant : faire connaître le domaine de la conservation des documents photographiques aux étudiants et aux stagiaires qui viennent au laboratoire de conservation des photographies des Archives nationales du Canada; et satisfaire aux nombreuses demandes de particuliers et d'institutions relativement à des ouvrages de référence sur la préservation des documents photographiques.

Cette bibliographie renferme surtout des titres portant sur la préservation des photographies créées au moyen de procédés fondés sur la photosensibilité des halogénures d'argent. Certains documents traitant des propriétés et de la préservation des microfilms et des films cinématographiques y sont également mentionnés. En outre, on y a inclus le titre de quelques articles sur la stabilité des surfaces photographiques non argentiques utilisées comme microfilms. Les titres sont groupés par sujet (11 parties). Cette répartition doit être considérée comme approximative, puisqu'il existe des ressemblances, par exemple entre les sujets traités à la partie V et ceux traités à la partie IX. Les articles qui ne se trouvent pas dans une partie donnée se trouvent probablement dans une autre partie connexe. Les écrits sont mentionnés par ordre chronologique dans chaque partie (le plus récent se trouve au début).

L'expression « de base », que renferme le titre, ne doit pas être interprétée comme étant synonyme de « simple »; elle indique plutôt que l'étude des ouvrages énumérés est indispensable pour quiconque désire sérieusement mieux connaître les documents photographiques et leurs propriétés, ainsi qu'effectuer des études et expériences en ce domaine. Comme les clichés et épreuves photographiques résultent de techniques industrielles très avancées, l'étude continue de ces techniques — dans la mesure où elles font l'objet de publications — est fortement recommandée.

Les guides bien connus énumérés ci-dessous renferment une foule de renseignements utiles et devraient donc être gardés à portée de la main et consultés fréquemment.

1. 1979. Haist, G. *Modern photographic processing.* New York : John Wiley and Sons. 2 vol.
2. 1977. Sturge, J.M., édit. *Neblette's handbook of photography and reprography: materials, processes and systems.* 7^{e} éd. (et éditions plus anciennes). New York : Van Nostrand Reinhold.
3. 1977. James, T.H., édit. *The theory of the photographic process.* 4^{e} éd. (et éditions plus anciennes coéditées par by C.E.K. Mees). New York : Macmillan.
4. 1976. Glafkidès, P. *Chimie et physique photographiques.* 4^{e} éd. Paris : Publications Photo-Cinéma Paul Montel.

5. 1976. Wall, E.J.; Jordan, F.I. *Photographic facts and formulas.* Revu et récrit par J.S. Carroll. Englewood Cliffs, NJ : Prentice-Hall.
6. 1973. Thomas, W., édit. *SPSE handbook of photographic science and engineering.* New York : Wiley.

J.M. Eder a publié un guide classique des techniques de photographie au cours des trois premières décennies du siècle en cours. On trouvera ci-après des renvois à deux volumes traitant de la fabrication des documents photographiques et de la confection d'épreuves photographiques sur papier et en noir et blanc. Ce guide n'a malheureusement pas été traduit en français.

7. 1930. Wentzel, F. *Die Fabrikation der photographischen Platten, Filme und Papiere und ihre maschinelle Verarbeitung* [La fabrication des plaques, des films et des papiers et leur traitement par machine]. Halle (Saale) : W. Knapp. (Ausführliches Handbuch der Photographie; vol. 3, part. 1)
8. 1928. Eder, J.M. *Die photographischen Kopierverfahren mit Silbersalzen (Positiv-Prozess) und die photographischen Roh- und Barytpapiere* [La production d'épreuves par des procédés photographiques utilisant les sels argentiques et les papiers photographiques]. Revu par F. Wentzel. Halle (Saale) : W. Knapp. (Ausführliches Handbuch der Photographie; vol. 4, part. 1)

La première version de la bibliographie a été rédigée en 1982, avec l'aide de Diane Hopkins, qui était chargée de créer une base de données automatisée à partir des milliers de documents que possède le laboratoire. Pour choisir les écrits qui composent la présente liste, on a utilisé cette base de données, qui est connue sous le nom de PHOCUS et qui renferme maintenant plus de 7 000 documents. D'après nous, les écrits choisis comptent parmi les documents clés dans le domaine de la conservation des photographies.

Les ouvrages de référence mentionnés dans la section qui porte sur le classement des photographies ont été signalés par Gerald Stone de la Division de l'art documentaire et de la photographie des Archives nationales du Canada. Ils font partie d'une bibliographie annotée plus complète qui se trouve dans la publication *Descriptive and Subject Cataloguing* (référence 3, section X).

La partie XI mentionne des publications de l'American National Standards Institute qui traitent de méthodes de contrôle des propriétés du matériel photographique ou qui renferment des recommandations sur la façon d'entreposer ce matériel. Un guide d'initiation rédigé par P.Z. Adelstein contient une introduction sur le sujet.

I. Histoire de la photographie

1. 1985. Coote, J.H. « Some landmarks in the history of photofinishing. » *Journal of Imaging Technology*. 11(3) : 87-92.

2. 1985. Krause, P. « 50 years of Kodachrome. » *Modern Photography*. 49(11) : 47-63, 83, 94, 96, 98, 104, 106, 108, 112, 114.

3. 1982. Gernsheim, H. *The origins of photography*. London : Thames and Hudson.

4. 1982. Newhall, B. *The history of photography from 1839 to the present*. New York : Museum of Modern Art.

5. 1981. Koshofer, G. *Farb Fotographie* [Photographie couleur] : *Band 1 — Alte Verfahren* [Procédés historiques]; *Band 2 — Moderne Verfahren* [Procédés modernes]; *Band 3 — Lexikon der Verfahren, Geräte und Materialien* [Dictionnaire des procédés, du matériel et de l'équipement]. Munich : Verlag Laterna magica.

6. 1979. Crawford, W. *The keepers of light; a history & working guide to early photographic processes*. Dobbs Ferry, NY : Morgan & Morgan.

7. 1979. Greenhill, R.; Birrell, A. *Canadian photography: 1839-1920*. Toronto : Coach House Press.

8. 1978. Eder, J.M. *History of photography*. Traduit par E. Epstean. New York : Dover Publications.

9. 1977. Hanson, W.T. « Forty years of color photography. » *Photographic Science and Engineering*. 21(6) : 293-296.

10. 1976. Staubach, H.W. « 40 years of Kodachrome. » *Popular Photography*. Septembre : 110-111, 146-151, 188.

11. 1975. Jenkins, R.V. *Images and enterprise: technology and the American photographic industry, 1839 to 1925*. Baltimore : Johns Hopkins University Press.

12. 1972. Pouradier, J.; Trillat, J.J. « Histoire des sciences : sur le centenaire de la découverte du gélatino-bromure d'argent, l'œuvre de Richard Leach Maddox. » *Comptes rendus hebdomadaires des séances de l'Académie des sciences.* Paris : Académie des sciences : t. 274 : 29-32.

13. 1970. Wall, E.J. *The history of three-color photography.* New York : Focal Press.

14. 1969. Gernsheim, H. et A. *The history of photography from the camera obscura to the beginning of the modern era.* New York : McGraw-Hill.

15. 1968. Friedman, J.S. *History of color photography.* New York : Focal Press.

16. 1964. Taft, R. *Photography and the American scene: a social history, 1839-1889.* New York : Dover Publications.

17. 1961. Mees, C.E.K. *From dry plates to Ektachrome film: a story of photographic research.* New York : Ziff-Davis.

18. 1961. Pollack, P. *Histoire mondiale de la photographie.* Adaptée par E. Sougez. Paris : Hachette.

19. 1960. Meyer, K. « Zur Geschichte des Agfacolor-Verfahrens » [De l'histoire du procédé Agfacolor]. *Bild und Ton.* 13(1-7) : 6-8; 37-39; 68-70, 86; 105-109; 140-142; 166-168; 205-206.

20. 1960. Wentzel, F. *Memoirs of a photochemist.* Philadelphie, PA : American Museum of Photography.

21. 1955. Matthews, G.E.; Tarkington, R.G. « Early history of amateur motion-picture film. » *Journal of the Society of Motion Picture and Television Engineers.* 64(mars) : 105-116.

22. 1954. Mees, C.E.K. « History of professional black-and-white motion-picture film. » *Journal of the Society of Motion Picture and Television Engineers.* 63(octobre) : 134-137.

23. 1951. Cornwell-Clyne, A. *Colour cinematography.* 3e éd. Londres : Chapman & Hall.

24. 1951. Sipley, L.W. *A half century of color.* New York : Macmillan.

25. 1933. Theisen, E. « The history of nitrocellulose as a film base. » *Journal of the Society of Motion Picture Engineers*. 20(mars) : 259-262.

26. 1927. Eder, J.M. *Die Photographie mit dem Kollodiumverfahren* [Les procédés au collodion en photographie]. Halle (Saale) : W. Knapp. (Ausführliches Handbuch der Photographie; vol. 2, part. 2)

II. Techniques photographiques de base

1. 1984. Reilly, J.M.; Kennedy, N.; Black, D.; Dam, T. Van « Image structure and deterioration in albumen prints. » *Photographic Science and Engineering*. 28(4) : 166-171.

2. 1981. Adelstein, P.Z.; McCrea, J.L. « Stability of processed polyester base photographic films. » *Journal of Applied Photographic Engineering*. 7(6) : 160-167.

3. 1981. « The chemistry of art — a sequel. » *Journal of Chemical Education*. 58(4) : 291-332. Une série d'articles par différents auteurs réimprimés comme un tout.

4. 1980. « The chemistry of art. » *Journal of Chemical Education*. 57(4) : 255-282. Une série d'articles par différents auteurs réimprimés comme un tout.

5. 1980. Eaton, G.T. *Photographic chemistry in black-and-white and color photography*. 3e éd. Dobbs Ferry, NY : Morgan & Morgan.

6. 1980. Kolf, G. « Modern photographic papers. » *British Journal of Photography*. 127(6244; 6245) : 296-299; 316-319.

7. 1979. Parsons, T.F.; Gray, G.G.; Crawford, I.H. « To RC or not to RC. » *Journal of Applied Photographic Engineering*. 5(2) : 110-117.

8. 1978. Reilly, J.M. « The manufacture and use of albumen paper. » *Journal of Photographic Science*. 26(4) : 156-161.

9. 1966. Hill, T.T. « Laboratory-scale photographic emulsion technique. » *Journal of Chemical Education*. 43(septembre) : 492-498.

10. 1965. Adelstein, P.Z.; McCrea, J.L. « Permanence of processed estar polyester base photographic films. » *Photographic Science and Engineering*. 9(5) : 305-313.

11. 1965. Henn, R.W.; Mack, B.D. « A gold protective treatment for microfilm. » *Photographic Science and Engineering*. 9(6) : 378-384.

12. 1965. Veelen, G.F. van. « Morphologie, Farbe und Deckkraft des Silbers des photographischen Bildes » [Morphologie, couleur et pouvoir couvrant de l'argent dans les photographies]. *Photographische Korrespondenz*. 101(10;11) : 149-155; 165-172.

13. 1963. Henn, R.W.; Wiest, D.G. « Microscopic spots in processed microfilm: their nature and prevention. » *Photographic Science and Engineering*. 7(5) : 253-261.

14. 1962. Weyde, E. « Grösse und Form des entwickelten Silberkornes und seine Beziehungen zu bildwichtigen Eigenschaften » [La taille et la forme du grain d'argent développé et ses rapports avec les propriétés de l'image]. *Photographische Korrespondenz*. 98(1) : 7-12.

15. 1957. Clerc, L.P. *La technique photographique*. Paris : Paul Montel.

16. 1955. White, D.R.; Gass, C.J.; Holm, W.R.; Meschter, E. « Polyester photographic film base. » *Journal of the Society of Motion Picture and Television Engineers*. 64(décembre) : 674-678.

17. 1950. Cummings, J.W.; Hutton, A.C.; Silfin, H. « Spontaneous ignition of decomposing cellulose nitrate film. » *Journal of the Society of Motion Picture and Television Engineers*. 54(mars) : 268-274.

18. 1931. Carroll, B.H. « The preparation of photographic emulsions. » *Journal of Chemical Education*. 8(12) : 2341-2367.

19. 1930. Heyne, W. « Die Filmfabrikation » [La fabrication de la pellicule photographique]. *Erzeugung und Prüfung lichtempfindlicher Schichten Lichtquellen*. Wien : Verlag von Julius Springer : 248-279. (Handbuch der wissenschaftlichen und angewandten Photographie. vol. 4)

20. 1930. Jahr, R. « Die Fabrikation der photographischen Trockenplatten » [La fabrication des plaques sèches pour photographie]. *Erzeugung und Prüfung lichtempfindlicher Schichten Lichtquellen*. Wien : Verlag von Julius Springer : 214-247. (Handbuch der wissenschaftlichen und angewandten Photographie. vol. 4)

21. 1927. Sheppard, S.E. « The chemistry of photography: I. Historical considerations; II. The latent image; III. Development of negative and positive images. » *Journal of Chemical Education*. 4 (3;4;6) : 298-312; 465-473; 749-757.

22. 1867. Schnauss, J. « Papier Leptographique. » *Photographisches Archiv*. 8(122) : 21-22.

III. Composition et propriétés des documents photographiques

1. 1986-1987. Hendriks, K.B. « Notes on microfilm. » *Archivaria.* 23(hiver) : 179-184.

2. 1984. Barger, M.S.; White, W.B. « Optical characterization of the daguerreotype. » *Photographic Science and Engineering.* 28(4) : 172-174.

3. 1984. Hendriks, K.B.; Lesser, B.; Stewart, J.; Nishimura, D. « Properties and stability of gelatin layers in photographic materials. » *American Institute for Conservation of Historic and Artistic Works, preprints of papers presented at the twelfth annual meeting, Los Angeles, California, 15-20 May, 1984.* Washington, DC : AIC : 52-62.

4. 1984. Reilly, J.M.; Kennedy, N.; Black, D.; Dam, T. Van « Image structure and deterioration in albumen prints. » *Photographic Science and Engineering.* 28(4) : 166-171.

5. 1982. Barger, M.S.; Messier, R.; White, W.B. « A physical model for the daguerreotype. » *Photographic Science and Engineering.* 26(6) : 285-291.

6. 1981. Feldman, L.H. « Discoloration of black-and-white photographic prints. » *Journal of Applied Photographic Engineering.* 7(1) : 1-9.

7. 1981. Kasper, K.B.; Wanka, R. « Chemical formulations and requirements of photographic paper. » *Journal of Applied Photographic Engineering.* 7(3) : 67-72.

8. 1981. Woodward, A.I. « The evolution of photographic base papers. » *Journal of Applied Photographic Engineering.* 7(4) : 117-120.

9. 1977. Adelstein, P.Z.; McCrea, J.L. « Dark image stability of diazo films. » *Journal of Applied Photographic Engineering.* 3(3) : 173-178.

10. 1977. Kurttila, K.R. « Dry silver film stability. » *Journal of Micrographics.* 10(3) : 113-117.

11. 1972. Adelstein, P.Z. « Stability of processed diazo and vesicular films. » *Micro-News Bulletin.* 1(août) : 9.

12. 1968. Fritsche, K. *Faults in photography: causes and correctives.* Trad. par L.A. Mannheim. New York : Focal Press.

13. 1965. Henn, R.W.; Wiest, D.G.; Mack, B.D. « Microscopic spots in processed microfilm: the effect of iodide. » *Photographic Science and Engineering.* 9(3) : 167-173.

14. 1965. James, T.H. « The stability of silver filaments. » *Photographic Science and Engineering.* 9(2) : 121-132.

15. 1964. Anderson, M.G.; Wagner, V.L., Jr. « Stability of vesicular microfilm images. » *Photographic Science and Engineering.* 8(6) : 353-358.

16. 1963. Henn, R.W.; Wiest, D.G. « Microscopic spots in processed microfilm: their nature and prevention. » *Photographic Science and Engineering.* 7(5) : 253-261.

17. 1960. Adelstein, P.Z.; Calhoun, J.M. « Interpretation of dimensional changes in cellulose ester base motion-picture films. » *Journal of the Society of Motion Picture and Television Engineers.* 69(mars) : 157-163.

18. 1959. Calhoun, J.M.; Leister, D.A. « Effect of gelatin layers on the dimensional stability of photographic film. » *Photographic Science and Engineering.* 3(1) : 8-17.

19. 1955. Carroll, J.F.; Calhoun, J.M. « Effect of nitrogen oxide gases on processed acetate film. » *Journal of the Society of Motion Picture and Television Engineers.* 64(septembre) : 501-507.

20. 1955. Fordyce, C.R.; Calhoun, J.M.; Moyer, E.E. « Shrinkage behavior of motion-picture film. » *Journal of the Society of Motion Picture and Television Engineers.* 64(février) : 62-66.

21. 1948. Fordyce, C.R. « Improved safety motion picture film support. » *Journal of the Society of Motion Picture Engineers.* 51(4) : 331-350.

22. 1944. Calhoun, J.M. « The physical properties and dimensional behavior of motion picture film. » *Journal of the Society of Motion Picture Engineers.* 43(4) : 227-266.

23. 1938. Maurer, J.A.; Bach, W. « The shrinkage of acetate-base motion picture films. » *Journal of the Society of Motion Picture Engineers.* 31(juillet-décembre) : 15-27.

24. 1930. Trumm, A. « Die Herstellung photographischer Papiere » [La fabrication des papiers photographiques]. *Erzeugung und Prüfung lichtempfindlicher Schichten Lichtquellen.* Wien : Verlag von Julius Springer : 280-328. (Handbuch der wissenschaftlichen und angewandten Photographie. vol. 4)

25. 1927. Sheppard, S.E. « Behavior of gelatin in the processing of motion picture film. » *Transactions of the Society of Motion Picture Engineers.* 11(32) : 707-727.

IV. Identification et datation des documents photographiques

1. 1986. Reilly J.M. *Care and identification of 19th-century photographic prints.* Rochester, NY : Eastman Kodak Company. (Kodak publications; no. G-2S)

2. 1983. Coe, B.; Haworth-Booth, M. *A guide to early photographic processes.* Londres : Victoria and Albert Museum.

3. 1978. Gill, A.T. *Photographic processes, a glossary and a chart for recognition.* Londres : Museums Association. (Museums Association information sheets; no. 21)

4. 1978. Katcher, P. « How to date an image from its mat. » *PSA Journal.* 44(8) : 26.

5. 1978. Scheinmann, D. « How to date the carte de visite. » *PSA Journal.* 44(9) : 22-23.

6. 1977. Baragwanath, A.K. « Dating photographs. » *Curator.* 20(1) : 42-47.

7. 1974. Pilling, A.R. « Dating early photographs by card mounts and other external evidence: tentative suggestions. » *Image.* 17(1) : 11-16.

8. 1972. Zucker, H. « Old-time processes — how to identify and date them. » *Popular Photography.* Décembre : 99-101, 170, 216.

V. Conservation des documents photographiques

1. 1987. Hendriks, K.B. « Storage and handling of photographic materials. » Smith, M.A., édit. *Preservation of Library materials, conference held at the National Library of Austria, April 7-10, 1986*. Munich : K.G. Saur; vol. 2 : 55-66.

2. 1986. Fédération internationale des archives du film. *Preservation and restoration of moving images and sound*. Bruxelles : FIDA.

3. 1986. Hendriks, K.B. *Storage and care of photographs*. New York : New York State Conservation Consultancy, Cooper-Hewitt Museum. (New York State Conservation Consultancy bulletins; no. 16)

4. 1986. National Research Council. *Preservation of historical records*. Washington, DC : National Academy Press.

5. 1986. Archives publiques du Canada. Division de la restauration des peintures et estampes. *Le soin des images photographiques enchâssées*. Ottawa : Institut canadien de la conservation. (ICC notes; n° 16/1)

6. 1986. Archives publiques du Canada. Division de la restauration des peintures et estampes. *Le soin des négatifs photographiques en noir et blanc sur plaque de verre*. Ottawa : Institut canadien de la conservation. (ICC notes; n° 16/2)

7. 1986. Archives publiques du Canada. Division de la restauration des peintures et estampes. *Le soin des négatifs photographiques en noir et blanc sur pellicule*. Ottawa : Institut canadien de la conservation. (ICC notes; n° 16/3)

8. 1986. Archives publiques du Canada. Division de la restauration des peintures et estampes. *Le soin des épreuves photographiques en noir en blanc*. Ottawa : Institut canadien de la conservation. (ICC notes; n° 16/4)

9. 1986. Archives publiques du Canada. Division de la restauration des peintures et estampes. *Le soin des documents photographiques couleur*. Ottawa : Institut canadien de la conservation. (ICC notes; n° 16/5)

10. 1986. Archives publiques du Canada. Division de la restauration des peintures et estampes. *Le traitement des pellicules et papiers photographiques noir et blanc modernes*. Ottawa : Institut canadien de la conservation. (ICC notes; n° 16/6)

11. 1985. *Conservation et restauration du patrimoine photographique : Actes du colloque de novembre 1984 organisé dans le cadre du Mois de la Photo à Paris par l'Atelier de Restauration de Photographies de la Ville de Paris avec la participation de l'École Nationale de la Photographie*. Paris : Audiovisuel.

12. 1985. Eastman Kodak Company. *Conservation of photographs*. Rochester, NY : Eastman Kodak Company. (Kodak publications; no. F-40)

13. 1985. Kopperl, D.F.; Bard, C.C. « Freeze/thaw cycling of motion picture films. » *SMPTE Journal*. 94(8) : 826-827.

14. 1984. Hendriks, K.B. *La conservation et la restauration des documents photographiques dans les institutions d'archives et les bibliothèques : une étude RAMP, accompagnée de principes directeurs*. Paris : UNESCO. (PGI-84/WS/1)

15. 1984. Ritzenthaler, M.L.; Munoff, G.J.; Long, M.S. *Archives and manuscripts: administration of photographic collections*. Chicago : Society of American Archivists. (SAA basic manual series)

16. 1983. Eastman Kodak Company. *The book of film care*. Rochester, NY : Eastman Kodak Company. (Kodak publications; no. H-23)

17. 1983. Hendriks, K.B.; Lesser, B. « Disaster preparedness and recovery: photographic materials. » *American Archivist*. 46(1) : 52-68.

18. 1983. Mathey, G. et al. *Air quality criteria for storage of paper-based archival records*. Washington, DC : National Bureau of Standards. (NBSIR 83-2795)

19. 1983. Polaroid Corporation. *Storing, handling, and preserving Polaroid photographs: a guide*. Toronto : Focal Press.

20. 1982. Hendriks, K.B. « The conservation of photographic materials. » *Picturescope*. 30(1) : 4-9.

21. 1982. Padfield, T.; Erhardt, D.; Hopwood, W. « Trouble in store. » *Science and technology in the service of conservation, 1982, IIC preprints*. Londres : International Institute for Conservation of Historic and Artistic Works; 24-27.

22. 1982. *Caring for photographs: display, storage, restoration.* New York : Time-Life Books. (Life library of photography)

23. 1981. Gillet, M.; Garnier, C.; Flieder, F. « Influence de l'environnement sur la conservation des documents photographiques modernes. » *Les documents graphiques et photographiques : analyse et conservation.* Paris : Éditions du Centre national de la recherche scientifique : 93-109.

24. 1981. Rinhart, F.; Rinhart, M. *The American daguerreotype.* Athens, GA : University of Georgia Press.

25. 1979. Swan, A.; Fiori, C.E.; Heinrich, K.F.J. « Daguerreotypes: a study of the plates and the process. » *Scanning electron microscopy.* AMF O'Hare, IL : SEM Inc. : 411-424.

26. 1978. Adelstein, P.Z. « Preservation of microfilm. » *Journal of Micrographics.* Juillet-août : 333-337.

27. 1978. Pobboravsky, I. « Daguerreotype preservation: the problems of tarnish removal. » *Technology and Conservation.* 3(2) : 40-45.

28. 1978. Swan, A. « Conservation treatments for photographs: a review of some of the problems, literature and practices. » *Image.* 21(2) : 24-31.

29. 1977. Schwarz, D., édit. *Conservation des images fixes.* Préparé avec la collaboration de la Commission de Conservation d'Interphotothèque. Paris : Documentation française. (Guide pratique des photothèques; n° 3)

30. 1977. Weinstein, R.A.; Booth, L. *Collection, use and care of historical photographs.* Nashville, TN : American Association for State and Local History.

31. 1976. Bovis, M. « À propos de la restauration et de la conservation des daguerréotypes. » *Photo-Revue.* Janvier : 58.

32. 1976. Hannavy, J. « The magnificent ambrotypes. » *British Journal of Photography.* 123(8) : 153-155.

33. 1976. Ostroff, E. *Conserving and restoring photographic collections.* Washington, DC : American Association of Museums.

34. 1975. Hannavy, J. « The lowly tintype. » *British Journal of Photography.* 122(6023) : 1168-1170.

35. 1974. National Fire Protection Association. *Standard for storage and handling of cellulose nitrate motion picture film, 1974.* Boston : National Fire Protection Association. (NFPA no. 40)

36. 1973. Montuori, T.R. « Lessons learned from Agnes. » *Journal of Micrographics.* 6(3) : 133-136.

37. 1973. Montuori, T.R. « Salvaging damaged microfilm. » *Microfilm Techniques.* s.v. : 10, 18.

38. 1972. Weyde, E. « A simple test to identify gases which destroy silver images. » *Photographic Science and Engineering.* 16(4) : 283-286.

39. 1971. Bovis, M. « Les anciens procédés photographiques : V. Amphitypie, ferrotypie, collodion sec. » *Photo-Ciné-Revue.* Octobre : 450-453.

40. 1971. Bovis, M. « Les anciens procédés photographiques : 1. La découverte et le daguerréotype. » *Photo-Ciné-Revue.* Avril : 176-180.

41. 1971. Flink, J.; Hoyer, H. « Conservation of water-damaged written documents by freeze-drying. » *Nature.* 234(décembre) : 420.

42. 1971. Pobboravsky, I. *Study of iodized daguerreotype plates.* Rochester, NY : Rochester Institute of Technology.

43. 1970. Eaton, G.T. « Preservation, deterioration and restoration of photographic images. » *Library Quarterly.* 40(1) : 85-98.

44. 1970. McCamy, C.S.; Pope, C.I. « Redox blemishes — their cause and prevention. » *Journal of Micrographics.* 3(4) : 165-170.

45. 1969. McCamy, C.S.; Wiley, S.R.; Speckman, J.A. « A survey of blemishes on processed microfilm. » *Journal of Research of the National Bureau of Standards — A. Physics and Chemistry.* 73A(1) : 79-97. Un formulaire de travail et de rapport sur deux pages suit l'article.

46. 1967. Ostroff, E. « Preservation of photographs. » *Photographic Journal.* Octobre : 309-314.

47. 1967. Pouradier, J.; Hodot-Mailliet, A.M.; Rigola, J. « Conservation des documents photographiques sur papier. II. Influence des conditions de traitement sur la stabilité de l'image. » *Science et Industries photographiques*. 38(1) : 1-7.

48. 1965. Pouradier, J.; Mailliet, A.M. « Conservation des documents photographiques sur papier. I. Influence du thiosulfate résiduel et des conditions de stockage. » *Science et Industries photographiques*. 36(2/3) : 29-42.

49. 1964. McCamy, C.S. *Inspection of processed photographic record films for aging blemishes*. Washington, DC : National Bureau of Standards. (National Bureau of Standards handbooks; no. 96)

50. 1960. Calhoun, J.M. « Technology of new film bases. » *Perspective*. 2(3) : 250-256.

51. 1960. Henn, R.W.; Olivares, I.A. « Tropical storage of processed negatives. » *Photographic Science and Engineering*. 4(4) : 229-233.

52. 1958. Hutchison, G.L.; Ellis, L.; Ashmore, S.A. « The surveillance of cinematograph record film during storage. » *Journal of Applied Chemistry*. 8(janvier) : 24-34.

53. 1958. Newhall, B. « Ambrotype: a short and unsuccessful career. » *Image*. 7(octobre) : 171-177.

54. 1953. Calhoun, J.M. « Storage of nitrate amateur still-camera film negatives. » *Journal of the Biological Photographic Association*. 21(3) : 1-13.

55. 1952. Calhoun, J.M. « Cold storage of photographic film. » *Photographic Science and Technique*, Section B de *PSA Journal*. 18B(octobre) : 1-4.

56. 1939. Scribner, B.W. *Summary report of research at the National Bureau of Standards on the stability and preservation of records on photographic film*. Washington, DC : National Bureau of Standards. (National Bureau of Standards miscellaneous publications; no. M162)

57. 1923. Deck, N.C. « The permanence of photographic prints as tested by tropical climates. » *British Journal of Photography*. 70(3284) : 222-223.

58. 1892. Gladstone, J.S. « Fugacity of bromide prints. » *British Journal of Photography*. Juillet 29 : 484.

59. 1879. Heighway, W. « The ferrotype. » *The Practical Photographer*. 3(7) : 686-688.

60. 1872. Estabrooke, E.M. *The ferrotype and how to make it*. Réimpression de 1972. Hastings-on-Hudson, NY : Morgan & Morgan.

61. 1866. Lea, M.C. « An examination into the circumstances under which silver is found in the whites of albumen prints. » *Photographic News*. 10(415;416) : 394-395; 402-403.

62. 1863. Spiller, J. « Silver in the whites of albumenized prints. » *Photographic News*. 7(6 février) : 63-64.

63. 1855. Delamotte, P.H. et al. « First report of the committee appointed to take into consideration the question of the fading of positive photographic pictures upon paper. » *Journal of the Photographic Society*. 36(21 novembre) : 251-252.

64. 1839. Daguerre, L.J.M. *Historique et description des procédés du daguerréotypie et du diorama*. Paris : Susse Frères.

VI. Reproduction et tirage

1. 1987. Eastman Kodak Company. *Kodak professional black-and-white films.* Rochester, NY : Eastman Kodak Company. (Kodak publications; no. F-5)

2. 1986. Hendriks, K.B.; Madeley, D.R.; Toll, F.; Thurgood, B. « The duplication of historical black-and-white negatives. » *Journal of Imaging Technology.* 12(4) : 185-199.

3. 1985. Eastman Kodak Company. *Quality enlarging with Kodak black-and-white papers.* Rochester, NY : Eastman Kodak Company. (Kodak publications; no. G-1)

4. 1984. Eastman Kodak Company. *Copying and duplicating in black-and-white and color.* Rochester, NY : Eastman Kodak Company. (Kodak publications; no. M-1)

5. 1984. Eggleston, J. *Sensitometry for photographers.* Londres : Focal Press.

6. 1981. Todd, H.N.; Zakia, R.D. *Photographic sensitometry: the study of tone reproduction.* 2e éd. Dobbs Ferry, NY : Morgan & Morgan.

7. 1950. Rudd, R.G. « Copying the black-and-white print. » *Photographic Science and Technique,* Section B de *PSA Journal.* 16B(juin) : 30-38.

8. 1930. Eder, J.M.; Lüppo-Cramer, H. *Verarbeitung der photographischen Platten, Filme und Papiere* [Le traitement des plaques, films et papiers photographiques]. Halle (Saale) : W. Knapp. (Ausführliches Handbuch der Photographie; vol. 3, part. 2)

VII. Traitement des pellicules et papiers en noir et blanc

1. 1986. Drago, F.J.; Lee, W.E. « Review of the effects of processing on the image stability of black-and-white silver materials. » *Journal of Imaging Technology*. 12(1) : 57-65.

2. 1986. Kopperl, D.F.; Huttemann, T.J. « Effect of residual thiosulfate ion on the image stability of microfilms. » *Journal of Imaging Technology*. 12(4) : 173-180.

3. 1985. Eastman Kodak Company. *Black-and-white processing using Kodak chemicals*. Rochester, NY : Eastman Kodak Company. (Kodak publications; no. J-1)

4. 1985. Eastman Kodak Company. *Finishing prints on Kodak water-resistant papers*. Rochester, NY : Eastman Kodak Company. (Kodak publications; no. E-67)

5. 1985. Eastman Kodak Company. *Practical densitometry*. Rochester, NY : Eastman Kodak Company. (Kodak publications; no. E-59)

6. 1984. Drago, F.J.; Lee, W.E. « Stability and restoration of images on Kodak professional B/W duplicating film/4168. » *Journal of Imaging Technology*. 10(3) : 113-118.

7. 1984. Lee, W.E.; Drago, F.J.; Ram, A.T. « New procedures for processing and storage of Kodak spectroscopic plates type IIIa-J. » *Journal of Imaging Technology*. 10(1) : 22-28.

8. 1984. Lee, W.E.; Wood, B.; Drago, F.J. « Toner treatments for photographic images to enhance image stability. » *Journal of Imaging Technology*. 10(3) : 119-126.

9. 1983. Adams, A. *The negative*. Boston : Little, Brown, and Company.

10. 1983. Adams, A. *The print*. Boston : Little, Brown, and Company.

11. 1983. Eastman Kodak Company. *Kodak neutral density attenuators*. Rochester, NY : Eastman Kodak Company. (Kodak publications; no. P-114)

12. 1981. Eastman Kodak Company. *Processing and process monitoring of Kodak black-and-white films.* Rochester, NY : Eastman Kodak Company. (Kodak publications; no. Z-126)

13. 1981. Mason, L.F.A.; Gent, M.H.; Parsons, R.R. « Processing black-and-white prints on paper base for permanence. » *Journal of Applied Photographic Engineering.* 7(2) : 64-66.

14. 1977. Hendriks, K.B. « Archival processing: how to make a lasting impression on history. » *Canadian Photography.* 7(12) : 22-25; 32.

15. 1974. Crawley, G. « Ilfospeed system. » *British Journal of Photography.* 39(27 septembre) : 849-851.

16. 1972. Pouradier, J. « Dosage du thiosulfate résiduel dans les films et plaques photographiques. » *Informations de la Société française de photographie.* 10(décembre) : 1-3.

17. 1965. Henn, R.W.; Mack, B.D. « A gold protective treatment for microfilm. » *Photographic Science and Engineering.* 9(6) : 378-384.

18. 1953. Crabtree, J.I.; Henn, R.W.; Edgerton, R.F. « Two-bath fixation of prints. » *Photographic Science and Technique,* Section B de *PSA Journal.* 19B(février) : 10-16.

19. 1943. Crabtree, J.I.; Eaton, G.T.; Muehler, L.E. « Fixing and washing for permanence. » *PSA Journal.* 9(3;4) : 115-123; 162-170, 192.

20. 1936. Formstecher, F. « Zur Geschichte und Theorie der Selentonung » [L'histoire et la théorie de la coloration au sélénium]. *Photographische Industrie.* 34 : 1014-1018.

21. 1924. Lumière, A.; Lumière, L.; Seyewetz, A. « Sur la durée du fixage des papiers par développement. » *La Revue française de photographie.* 5(15 février) : 37-39.

22. 1879. « Some peculiarities of toning. » *British Journal of Photography.* 26(1012) : 455-456.

VIII. Documents photographiques en couleurs

1. 1986. Hagen, R. « Further improvements in the permanence of Cibachrome materials under adverse display conditions. » *Journal of Imaging Technology.* 12(3) : 160-162.

2. 1986. Nickel, U. « The influence of deamination on the stability of photographic dyes. » *Journal of Imaging Technology.* 12(4) : 181-184.

3. 1985. Bermane, D. « Influence of azo-dye aggregation on the dark stability of Cibachrome images. » *Journal of Imaging Technology.* 11(3) : 105-108.

4. 1985. Heidke, R.L.; Feldman, L.H.; Bard, C.C. « Evolution of Kodak photographic color negative print papers. » *Journal of Imaging Technology.* 11(3) : 93-97.

5. 1985. Koboshi, S.; Kurematsu, M. « A new stabilization process for color films and prints using Konica Super Stabilizer. » *Society of Photographic Scientists and Engineers second international symposium: the stability and preservation of photographic images, printing of transcript summaries; 1985 August 25-28; Ottawa, Canada.* Springfield, VA : Society of Photographic Scientists and Engineers : 350-375.

6. 1985. Krause, P. « Preservation of autochrome plates in the collection of the National Geographic Society. » *Journal of Imaging Science.* 29(5) : 182-192.

7. 1985. Krause, P. « The stability of color prints. » *Technical Photography.* 17(7) : 28-31, 58-59.

8. 1984. Seoka, Y. « Shashin gazo hozon jotai no kaiseki » [Étude analytique sur l'entreposage et l'exposition des photographies]. *Nihon Shashin Gakkaishi.* 47(1) : 14-17.

9. 1983. Meyer, A. « Silver dye-bleach color microfilm. » *Journal of Applied Photographic Engineering.* 9(4) : 117-119.

10. 1983. Meyer, A.; Bermane, D. « The stability and permanence of Cibachrome images. » *Journal of Applied Photographic Engineering.* 9(4) : 121-125.

11. 1983. Schrock, N.C.; Sundt, C.L. « Slides. » Dans : Swartzburg, S.G., édit. *Conservation in the Library*. Westport, CT : Greenwood Press : 103-128.

12. 1982. Carl, K.J., Jr.; Erwin, J.W.; Powell, S.J.; Reinking, F.R.; Sehlin, R.C.; Spakowsky, S.W.; Szafranski, W.A.; Wien, R.W. « Eastman color print film 5384. » *SMPTE Journal*. 91(12) : 1161-1170.

13. 1982. Schwalberg, B. « Color preservation update. » *Popular Photography*. 89(1) : 81-85, 131.

14. 1982. Seoka, Y.; Kubodera, S.; Aono, T.; Hirano, M. « Some problems in the evaluation of color image stability. » *Journal of Applied Photographic Engineering*. 8(2) : 79-82.

15. 1981-1982. Sundt, C.L. « Mounting slide film between glass — for preservation or destruction? » *Visual Resources*. 2(1/2/3) : 37-62.

16. 1981. Eastman Kodak Company. *Evaluating dye stability of Kodak color products*. Rochester, NY : Eastman Kodak Company. (Kodak publications; CIS no. 50)

17. 1981. Wilhelm, H. « Monitoring the fading and staining of color prints. » *Journal of the American Institute for Conservation*. 21 : 49-64.

18. 1980. Bard, C.C.; Larson, G.W.; Hammond, H.; Packard, C. « Predicting long-term dark storage dye stability characteristics of color photographic products from short-term tests. » *Journal of Applied Photographic Engineering*. 6(2) : 42-45.

19. 1979. Tuite, R.J. « Image stability in color photography. » *Journal of Applied Photographic Engineering*. 5(4) : 200-207.

20. 1978. Wilhelm, H. « Storing color materials: frost-free refrigerators offer a low-cost solution. » *Industrial Photography*. 27(10) : 32-35.

21. 1976. Smith, W.F.,Jr.; Herkstroeter, W.G.; Eddy, K.L. « Mechanistic pathways for visible light fading of pyrazolone azomethine dyes in oil-in-gelatin dispersions. » *Photographic Science and Engineering*. 20(3) : 140-148.

22. 1974. Bermane, D. « On the resistance to fading of silver dye bleach transparencies. » *Journal of Photographic Science*. 22(2) : 84-92.

23. 1974. Rogers, H.G.; Idelson, M.; Cieciuch, R.F.W.; Bloom, S.M. « Light stability of new Polaroid colour prints. » *Journal of Photographic Science.* 22(3) : 138-142.

24. 1973. Giles, C.H.; Forrester, S.D.; Haslam, R.; Horn, R. « Light fastness evaluation of colour photographs. » *Journal of Photographic Science.* 21(1) : 19-23.

25. 1970. Adelstein, P.Z.; Graham, C.L.; West, L.E. « Preservation of motion-picture color films having permanent value. » *Journal of the Society of Motion Picture and Television Engineers.* 79(11) : 1011-1018.

26. 1967. Hubbell, D.C.; McKinney, R.G.; West, L.E. « Methods for testing image stability of color photographic products. » *Photographic Science and Engineering.* 11(5) : 295-305.

27. 1965. Gröger, R.; Pietrzok, H. « Über die Beständigkeit gelber Azomethinfarbstoffe » [De la stabilité des colorants jaunes d'azométhine]. *Veröffentlichungen der wissenschaftlichen Photo-Laboratorien — Wolfen.* 10 : 309-315.

28. 1965. Traue, S.; Schmidt, S.; Pietrzok, H. « Beständigkeit von Azofarbstoffen von lange alkylreste enthaltenden 5-Pyrazolonen und 1-Hydroxy-2-naphthoesäureamiden » [La permanence des colorants azoïques de 5-pyrazolones et de 1-hydroxy-2-amides contenant de longues chaînes d'alkyle]. *Veröffentlichungen der wissenschaftlichen Photo-Laboratorien — Afga.* 10 : 301-308.

29. 1961. Gröger, R. « Die Bestimmung der Hydrolysebeständigkeit und Lichtechtheit der Bildfarbstoffe des Agfacolor-materials » [La détermination de la stabilité des colorants Agfocolor soumis à l'hydrolyse et de leur solidité à la lumière]. *Veröeffentlichungen der wissenschaftlichen Photo-Laboratorien — Afga.* 9 : 128-132.

30. 1961. Widmayer, W. « Cold storage protects color negatives. » *American Cinematographer.* 42 : 170-172, 174.

31. 1955. Meyer, K. « Zur altersbedingten Veränderung der Farbenwerte von Farbenfotos » [Du décalage de l'équilibre des couleurs, causé par le vieillissement dans les photographies couleur]. *Bild und Ton.* 8(6) : 158-159.

32. 1951. Hedden, W.; Weaver, T.; Thompson, L. « Processing 16-mm Kodachrome prints. » *Journal of the Society of Motion Picture and Television Engineers.* 57(octobre) : 308-315.

33. 1944. Schneider, W.; Fröhlich, A.; Schulze, H. « Die diffusionsechten Farbbildner des Agfacolorfilms » [Les coupleurs colorés non diffusibles des films Agfacolor]. *Die Chemie*. 57(17/20) : 113-116.

34. 1942. Mees, C.E.K. « Direct processes for making photographic prints in color. » *Journal of the Franklin Institute*. 233(janvier) : 41-50.

35. 1936. Davies, E.R. « The Kodachrome process of 16 mm. colour kinematography. » *Photographic Journal*. 76(avril) : 248-253.

36. 1935. Mannes, L.D.; Godowsky, L. « The Kodachrome process for amateur cinematography in natural colors. » *Journal of the Society of Motion Picture Engineers*. 25(juillet) : 65-68.

37. 1935. Mees, C.E.K. « Eastman Kodak Company announces Kodachrome process. » *International Photographer*. Mai : 16-17, 20.

38. 1914. Fischer, R.; Siegrist, H. « Über die Bildung von Farbstoffen durch Oxydation mittels belichteten Halogensilbers » [De la formation des colorants par exposition de l'halogénure d'argent]. *Photographische Korrespondenz*. 640; 644 : 18-22; 208-211.

IX. Traitements en conservation

1. 1987. Hendriks, K.B.; Ross, L. « Further experiments on the restoration of discoloured black-and-white photographic images in chemical solutions. » *ICOM Committee for Conservation, 8th triennial meeting, Sydney, Australia, 7-11 September 1987, preprints.* Paris : International Council of Museums : 667-669.

2. 1986. Cowan, J. *Techniques de nettoyage à sec du papier.* Ottawa : Institut canadien de la conservation. (Bulletins techniques de l'ICC : n° 11)

3. 1986. Gillet, M.; Garnier, C.; Flieder, F. « Les négatifs sur plaques de verre : conservation et restauration. » Dans : *Les documents graphiques et photographiques : Analyse et conservation. — Travaux du Centre de recherche sur la conservation des documents graphiques, 1984-1985.* Paris : Archives nationales : 207-242.

4. 1985. Hendriks, K.B. « Experiments on the restoration of discoloured black-and-white photographs in chemical solutions. » *Society of Photographic Scientists and Engineers, second international symposium: the stability and preservation of photographic images, printing of transcript summaries; 1985 August 24-28; Ottawa, Canada.* Springfield, VA : Society of Photographic Scientists and Engineers : 148-163.

5. 1984. Hendriks, K.B.; Tom, B.L.; Sergeant, C.; Evans, C.; Melnick, J.; Poitras, P.; Nishimura, D. « Experiments on the restoration of discoloured black-and-white photographs in chemical solutions. » *ICOM Committee for Conservation, 7th triennial meeting, Copenhagen, 10-14 September 1984, preprints.* Paris : International Council of Museums : vol. 2, 84.14.34-84.14.37.

6. 1984. Johnsen, J.S. « Die Restaurierung vergilbter Zellulosenitra—und Glasplattennegative » [La restauration des négatifs jaunis sur nitrate de cellulose et sur plaques de verre]. *Maltechnik Restauro.* n° 1(janvier) : 57-72.

7. 1984. Koch, M.S.; Sjogren, A. « Behandlung von Daguerreotypien mit Wasserstoffplasma » [Le traitement des daguerréotypes avec du plasma d'hydrogène]. *Maltechnik Restauro.* n° 4(octobre) : 58-64.

8. 1983. Rempel, S. « Preparation of a calotype waxed paper negative for patron use. » Dans : Morrow, C.C. *The preservation challenge: a guide to conserving library materials.* White Plains, NY : Knowledge Industry Publications : 151-153.

9. 1981. Smith, M.A. *Matting and hinging works of art on paper*. Washington, DC : Library of Congress.

10. 1977. Gear, J.L.; MacClaren, R.H.; McKiel, M. « Film recovery of some deteriorated black and white negatives. » *American Archivist*. 40(3) : 363-368.

11. 1952. Eastman Kodak Company. *Stains on negatives and prints*. Rochester, NY : Eastman Kodak Company. (Kodak photographic notebooks; no. J-18)

12. 1951. Henn, R.W.; Crabtree, J.I.; Russell, H.D. « An ammonium hypo reducer. » *Photographic Science and Technique*, Section B de *PSA Journal*. 17B(novembre) : 110-113.

13. 1927. Wall, E.J. *Intensification and reduction: a critical résumé of all known methods*. Boston : American Photographic Publishing.

14. 1921. Crabtree, J.I. « Stains on negatives and prints: their cause, prevention and removal. » *American Annual of Photography*. 35 : 204-240.

15. 1920. Stenger, E. *Wiederherstellung alter photographischer Bilder und Reproduktion derselben im ursprünglichen und in neuzeitlichen Verfahren* [La restauration des vieilles photographies et leur reproduction à l'aide de méthodes anciennes et nouvelles]. Halle (Saale) : Verlag von Wilhelm Knapp. (Enzyklopädie der Photographie; Heft 97)

X. Classement des photographies

1. 1987. Vogt, D.L. *Smithsonian Archives photo survey project: a draft photographic thesaurus*. Washington, DC : Smithsonian Institution Archives.

2. 1986. Zinkham, H.; Parker, E.B.; compil. *Descriptive terms for graphic materials: genre and physical characteristic headings*. Washington, DC : Library of Congress.

3. 1985. National Photography Collection. *Descriptive and subject cataloguing*. Ottawa : Public Archives of Canada.

4. 1984. Pitts, T.; Denton, S. *CREATE: a procedure manual for cataloging photographs*. 2e éd. Tucson : Center for Creative Photography, University of Arizona.

5. 1984. Ritzenthaler, M.L.; Munoff, G.J.; Long, M.S. *Archives & manuscripts: administration of photographic collections*. Chicago : Society of American Archivists. (SAA basic manual series)

6. 1982. Betz, E.W., compil. *Graphic materials: rules for describing original items and historical collections*. Washington, DC : Library of Congress.

7. 1982. Dryden, J.E. *Images in time: a basic guide to the processing and preservation of historical photographs*. Edmonton : ACCESS, Alberta Educational Communications Corporation.

8. 1981. Harrison, H.P., édit. *Picture librarianship*. Phoenix, AZ : Oryx Press.

9. 1980. Betz, E.W. *Subject headings used in the Library of Congress Prints and Photographs Division*. Washington, DC : Library of Congress.

10. 1980. Evans, H. *Picture librarianship*. New York : K.G. Saur; Londres : Clive Bingley. (Outlines of modern librarianship)

11. 1980. Maounis, J., compil. « Cataloging historical photographs: a select bibliography. » *Picturescope*. 28(hiver) : 21.

12. 1980. *Règles de catalogage anglo-américaines*. 2e éd. Montréal : Asted.

13. 1980. Vogt, D.L. *The administration of photographic collections: a speech outline . . . for the American Association for State and Local History 1980 seminar on the administration of photographic collections, March 17-20, the Oakland Museum, Oakland, California.*

14. 1979. Bibliothèque nationale du Canada. Bureau canadien du MARC. *Format de communication du MARC canadien : monographies.* Ottawa : Bibliothèque nationale du Canada. Une version révisée de 1985 est disponible, dans laquelle les documents audio-visuels ont été renommés visuel pour refléter l'élargissements des règles aux documents bi-dimensionnels.

15. 1978. Betz, E.W. « Organization and cataloging of pictorial material in the Library of Congress Prints and Photographs Division. » Washington, DC. Il s'agit d'un document de travail et non d'une publication officielle.

16. 1978. Eskind, A.H.; Barsel, D. « International Museum of Photography at George Eastman House: conventions for cataloging photographs. » *Image.* 21(décembre) : 1-31.

17. 1972. Shaw, R.V. « Picture organization: practices and procedures. Parts 1 and 2. » *Special Libraries.* 63(octobre; novembre) : 448-456; 502-506.

XI. Publications de l'American National Standards Institute (ANSI) sur la préservation et le stockage des documents photographiques

1. 1988. American National Standards Institute. *American national standard for imaging media (film) — ammonia-processed diazo films — specifications for stability.* ANSI IT9.5-1988. New York : American National Standards Institute.

2. 1988. American National Standards Institute. *American national standard for imaging media (film) — silver-gelatin type — specifications for stability.* ANSI IT9.1-1988. New York : American National Standards Institute.

3. 1986. Adelstein, P.Z. « Status of permanence standards. » *Journal of Imaging Technology.* 12(1) : 52-56.

4. 1986. American National Standards Institute. *American national standard for photography (processing) — methods for evaluating processing with respect to the stability of the resultant image — black-and-white papers.* ANSI PH4.32-1986. New York : American National Standards Institute.

5. 1986. American National Standards Institute. *American national standard for photography (processing) — processed films, plates, and papers — filing enclosures and containers for storage.* ANSI PH1.53-1986. New York : American National Standards Institute. (Deviendra IT9.2 lorsque la révision sera approuvée.)

6. 1985. American National Standards Institute. *American national standard for photography (chemicals) — residual thiosulfate and other chemicals in films, plates, and papers — determination and measurement.* ANSI PH4.8-1985. New York : American National Standards Institute.

7. 1985. American National Standards Institute. *American national standard for photography (film) — processed safety film — storage.* ANSI PH1.43-1985. New York : American National Standards Institute. (Transféré au IT9, mais sans numéro.)

8. 1982. American National Standards Institute. *American national standard for photography (film and slides) — black-and-white photographic paper prints — practice for storage.* ANSI PH1.48-1982 (R1987). American National Standards Institute. (Transféré au IT9, mais sans numéro.)

9. 1981. American National Standards Institute. *Practice for storage of processed photographic plates.* ANSI PH1.45-1981. New York : American National Standards Institute. (Deviendra IT9.6 lorsque la révision sera approuvée.)

10. 1979. American National Standards Institute. *Specifications for thermally-activated dry-mounting tissue for mounting photographs.* ANSI PH4.21-1979. New York : American National Standards Institute. (En révision.)

11. 1969. American National Standards Institute. *Method for comparing the color stabilities of photographs.* ANSI PH1.42-1969 (R1987). New York : American National Standards Institute. (Transféré au IT9, mais sans numéro.)

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